

# A NEW BLENNY (TRIPTERYGIIDAE) AND PIPEFISH (SYNGNATHIDAE) FROM KANGAROO ISLAND, SOUTH AUSTRALIA

by T. D. Scott\*

[Read 11 October 1956]

## SUMMARY

A new genus and species of Blenny, *Brachynectes fasciatus*, and a new species of Pipefish, *Corythoichthys flindersi* are described and figured. A key is given to the genera of the Tripterygiidae of Australia.

## INTRODUCTION

During the past few years, the Museum has received several excellent collections of shallow water, weed-living fishes from Pelican Lagoon, Kangaroo Island, South Australia. The collections were made by Mr. H. M. Cooper, Assistant Anthropologist at the South Australian Museum.

A small mesh net was towed over the weedy bottom, in approximately two fathoms of water. In all, five collections were made during different periods of the year, resulting in a comprehensive sampling of the area.

## Family TRIPTERYGIIDAE.

A group of blennies with three dorsal fins and moderate to large scales.

### KEY TO THE GENERA OF THE TRIPTERYGIIDAE OF AUSTRALIA.

1. Lateral line single	2
Lateral line of two parts	3
2. Lateral line continued to caudal peduncle	<i>Lepidoblennius</i>
Lateral line ending in middle of side	<i>Helcogramma</i>
3. Head scaly	<i>Gillias</i>
Head naked	4
4. Second dorsal shorter than third dorsal	<i>Brachynectes</i> gen. nov.
Second dorsal longer than third dorsal	5
5. No scales between lateral line and back	<i>Notoclinops</i>
Several rows of scales between lateral line and back	6
6. Mouth large, reaching posterior border of eye	<i>Verconectes</i>
Mouth smaller, reaching anterior half of eye	7
7. Dorsal fins close together; no produced rays	<i>Vauchlusella</i>
Dorsal fins more separated; some rays produced	<i>Tripterygion</i>

### BRACHYNECTES gen. nov.

Body short, not much compressed. Covered with ctenoid scales of moderate size, extending on to the breast and belly. Head naked with numerous pores. Lateral line of two parts, the first short, formed of simple tubes, and separated by two rows of scales from the second, consisting of incised scales. Three dorsal fins, close together, the number of spines in the second less numerous than the number of rays of the third. Mouth large, extending to hind border of

\* South Australian Museum.

eye. Patches of villiform teeth in both jaws, becoming narrow laterally. No enlarged teeth. Vomer with patches of similar teeth. No teeth on palatines. Pectoral rays all simple. Ventrals of two simple rays. Caudal rounded.

Separated from other Australian genera in having the second dorsal fin shorter than the third.

*Brachynectes fasciatus* sp. nov.

D.iii.x.13 P.12 A.20-21 V.2 C.13 Br.6

Lat. line 10 + 21. Lat. trans. 2 : 7.

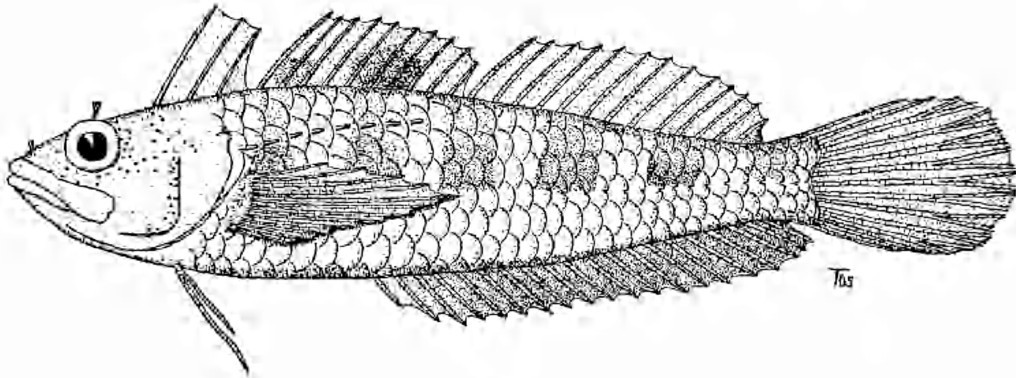


Fig. 1

Head length 12 mm. (3.9), body depth 10 (4.7), body width 8 (5.8) in the total length 47 mm. Snout 3 (4.0), eye 3 (4.0) in the head. Interorbital space less than eye. First dorsal spine the longest, length 5 mm., spines decreasing in size posteriorly.

Head large, naked. Several rows of pores below and behind the eye, across the nape, and on the preopercular margin. Anterior nostrils with a simple tentacle. A broader supra-orbital tentacle. Lips thick, mouth oblique, maxillary extending to hind-border of eye. A broad band of villiform teeth anteriorly in each jaw, narrowing laterally. No enlarged teeth. Similar teeth in patches on the vomer. Palatines toothless.

Gill membranes united, free from isthmus. Upper opercular margin incised. Scales ctenoid, moderate. Lateral line of two parts, a short upper part with simple tubes, ending below the seventh spine of the second dorsal fin, and a longer inferior part, consisting of incised scales. Two rows of scales between the two lateral lines. Thirty rows of scales between the shoulder and the caudal fin.

Dorsal fins close together, but not connected at their bases. Second dorsal shorter than the third. First dorsal commencing over hind margin of preoperculum. Pectoral long, reaching to end of second dorsal fin. All rays simple, the middle ones produced. Ventrals inserted below the preopercular hind margin. Caudal rounded, length 10 mm., none of the rays bifurcate.

*Colours* (in spirit): Head and body fawn. Body with five to six dark bars, extending down to the row of incised scales. Dorsal fins lightly spotted with black. Two black ocelli on the second dorsal. Anal fin dusky, the border white. Described from a specimen measuring 47 mm. total length, taken August, 1956, in Pelican Lagoon, Kangaroo Island, South Australia. Type in South Australian Museum, Reg. No. F.2921.

*Material Examined*: 31 specimens, range in length 29 mm. to 54 mm.

Family SYNGNATHIDAE.

Genus CORYTHOICHTHYS Kaup.

*Corythoichthys* Kaup, 1853, p. 231.

Whitley, 1948 (b), p. 268, designates *Syngnathus fasciatus* Gray, 1830 (non Risso), as genotype.

*Corythoichthys flindersi* sp. nov.

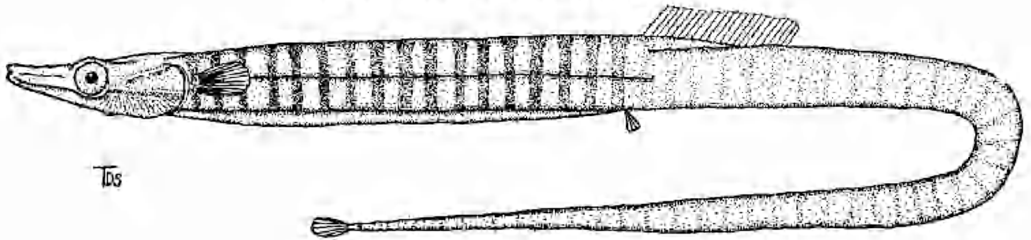


Fig. 2

D.21 C.6 P.12 A.4.

Rings 15 + 40. Female, no brood pouch.

Head 10 mm. (3.0) in the trunk and (9.1) in the total length 91 mm. Eye 2 (5.0), snout 4 (2.5) in the head. Trunk 30 (2.0) in the caudal. Body depth 4.5 (20), body width 3.2 (28) in the total length.

Snout rather short, almost equal to the postorbital part of the head. Operculum with two distinct keels, which join immediately behind the eye. Head with a sharp median ridge extending from the tip of the snout to the anterior interorbital region. A similar median ridge extending from the hind border of the eye on to the first body ring. Supraorbital ridges sharp, not quite reaching the dorsal body ridges. A distinct lateral ridge from the angle of the mouth, ending below the eye.

Trunk with 7 angles, caudal with 4. Lateral trunk ridges not continuous with upper tail ridges. Lower lateral ridges continuous. Pectoral fin small, length 2 mm. Dorsal fin short, length from origin to insertion 7 mm. Anal fin minute, with 4 rays. Caudal fin small, length 2 mm.

*Colours*: Body light fawn. Brown bands on the trunk, a bright blue spot at the top of each band, the space between these spots orange coloured. A small white spot on the edge of the ventral keel between the brown bands, marking the separate body rings. Ventral surface yellow to vent, white posteriorly. Head brown, with two white stripes on the cheeks, joining below. Snout yellow below, reddish above.

Type in South Australian Museum, Reg. No. F.2922.

*Affinities*: Similar to *C. vercoi* (Waite and Hale, 1921, p. 198), but separated by possessing 4 anal rays, absence of ridge from snout to first nostril, two ridges on operculum and differing in the colour pattern.

*Material Examined*: Two specimens measuring 91 mm. and 94 mm. total length.

Named after Captain Matthew Flinders, R.N., who discovered and named Pelican Lagoon on April 4th, 1802.

Three species of the genus *Corythoichthys* are now recognised from South Australia, and may be separated as follows:

- |  |       |       |       |                  |
|--|-------|-------|-------|------------------|
| 1. Length of snout equal to half length of head                            | ..... | ..... | ..... | <i>phillipi</i>  |
| Length of snout less than half length of head                              | ..... | ..... | ..... | 2                |
| 2. Two opercular ridges; 4 anal rays; no ridge from snout to first nostril | ..... | ..... | ..... | <i>flindersi</i> |
| One opercular ridge; 2 anal rays; a ridge from snout to first nostril      | ..... | ..... | ..... | <i>vercoi</i>    |

A further species, *Parasyngnathus poecilolaemus* (Peters, 1869), which was placed previously in the genus *Corythoichthys* by McCulloch (1929), has now been included in the genus *Parasyngnathus* by Whitley (1948, a).

#### REFERENCES

- KAUP, J. J., 1853. Arch. Naturges, 19, p. 1.  
McCULLOCH, A. R., 1929. Check-list fishes recorded from Australia.  
PETERS, W. C. H., 1869. Monatsb. Akad. Wiss. Berlin.  
WAITE, E. R., and HALE, H. M., 1921. Rec. S. Aust. Mus., 1, p. 4.  
WHITLEY, C. P., 1948a. Fish. Dept. Western Aust., Fish. Bull. No. 2.  
WHITLEY, G. P., 1948b. Aust. Zool., 11.